

SEMICONDUCTOR DEVICE AND PRODUCTION THEREOF

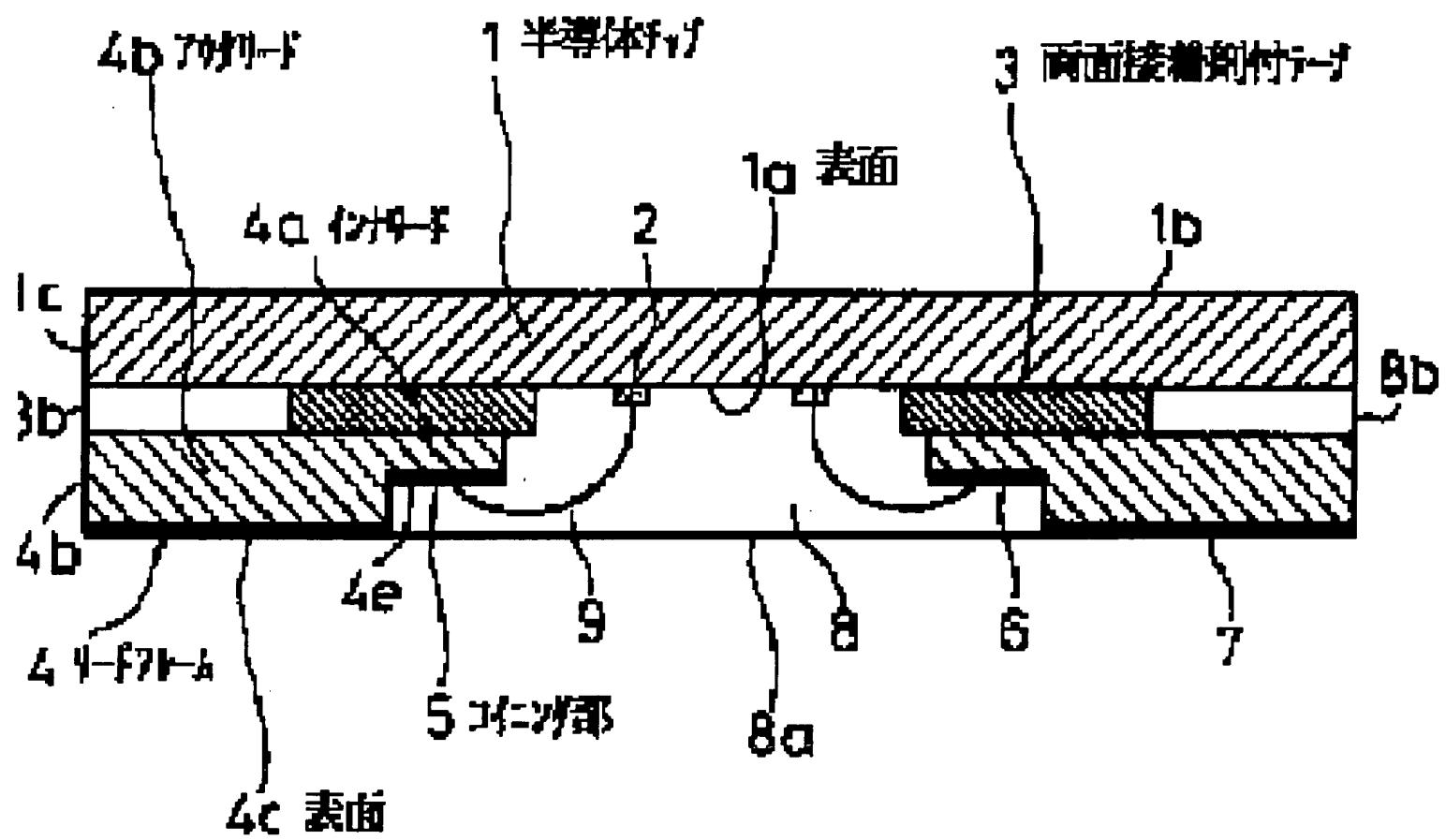
Patent Number: JP8064634
Publication date: 1996-03-08
Inventor(s): YAMADA TOMIO;; MURAKAMI HAJIME
Applicant(s): HITACHI LTD
Requested Patent: JP8064634
Application Number: JP19940221113 19940823
Priority Number(s):
IPC Classification: H01L21/60; H01L29/78
EC Classification:
Equivalents: JP3027512B2

Abstract

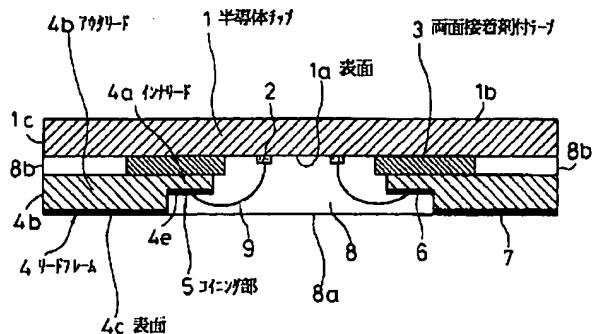
PURPOSE: To enhance the performance of a product by connecting each inner lead directly with a pellet at each connecting part thereby decreasing the external resistance significantly as compared with an electrical connection through bonding wire and separating a header from an inner lead group so that a best material can be employed for the inner lead and the header.

CONSTITUTION: A power transistor comprises a planar pellet 10 on which an MOSFET circuit is fabricated, three inner leads 35, 36, 37, a header 41 for enhancing the heat dissipation performance, and a resin seal 44 sealing the pellet 10, the inner lead group and a part of the header. Each inner lead is connected electrically and mechanically with a connecting part 25, 26, i.e., a bump, on the circuit side major surface of the pellet 10 and the header 41 is jointed to the opposite major surface of the pellet.

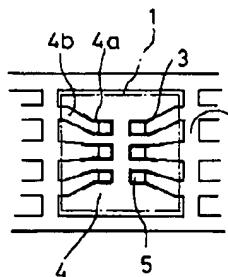
Data supplied from the esp@cenet database - I2



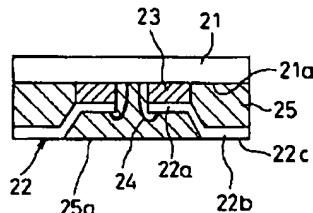
【図1】



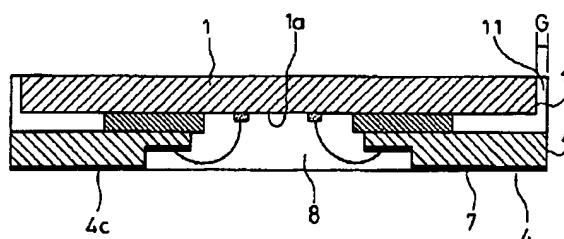
【図2】



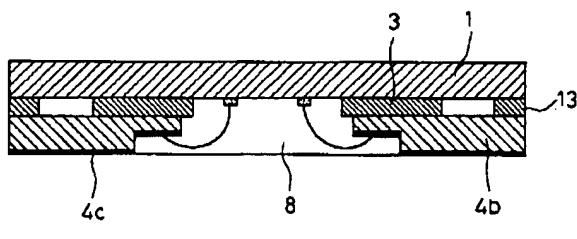
【図7】



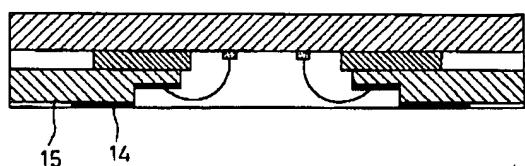
〔図3〕



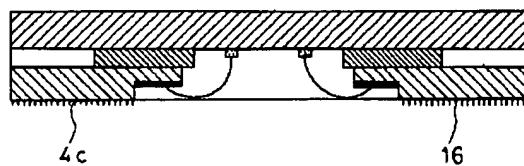
【図4】



〔図5〕



【図6】



フロントページの続き

(72)発明者 米本 隆治
茨城県土浦市木田余町3550番地 日立電線
株式会社システムマテリアル研究所内

(72) 発明者 吉岡 修
茨城県土浦市木田余町3550番地 日立電線
株式会社システムマテリアル研究所内